**We Claim**

1. A folding toothbrush comprising:

a handle;

an arm movably joined to said handle and having bristles disposed at one end thereof;

a power supply contained within the handle; and

a mechanical means contained within the arm and operated by said power supply to create movement of the bristles when said mechanical means is activated.

2. The toothbrush of claim 1, wherein the power supply includes a first electrical contact and the mechanical means includes a second electrical contact and when the toothbrush is in an unfolded position the first electrical contact makes an electrical connection with the second electrical contact to power the mechanical means.

3. The toothbrush of claim 2, wherein when the toothbrush is in a folded position, the electrical connection between the first and second electrical contacts is broken such that the mechanical means becomes disabled.

4. The toothbrush of claim 3, wherein the mechanical means to create movement of the bristles includes a motor mechanism and an offset weight that is spun about an axle that is rotated by the motor mechanism.

5. The toothbrush of claim 1, wherein said handle includes a cavity for receiving said arm and said bristles therein when the toothbrush is in a folded position.

6. The toothbrush of claim 2 further comprising a means to maintain the toothbrush in said unfolded position.

7. The toothbrush of claim 6, wherein the means to maintain the toothbrush in said unfolded position includes a detent fixed on the handle about a region defined as where the arm is joined to the handle, said detent moves in relation to a first recess, of a plurality of recesses fixed on the arm about said region.

8. A toothbrush comprising:

a handle and a power supply contained therein;

an arm movably joined to said handle and having bristles disposed at one end thereof;

a motor mechanism contained within the arm and operable to move said bristles when activated; and

a means for supplying power to the motor mechanism when the toothbrush is in an outstretched position.

9. The toothbrush of Claim 8, wherein the a means for supplying power to the motor mechanism when the toothbrush is in an outstretched position includes a first electrical contact in communication with the power supply and positioned in the handle, and a second electrical contact in communication with the motor mechanism and positioned in the arm such that when the arm and the handle are in the outstretched position the first and second electrical contacts make an electrical connection whereby power from the power supply is able to operate the motor mechanism.

10. The toothbrush of Claim 9, further comprising a weight attached to an axle that is rotated by the motor mechanism, the weight is positioned on the axle in proximity to the bristles such that when the axle is rotated the spinning weight causes the arm to oscillate such that the bristles vibrate.

11. The toothbrush of claim 8 further comprising:

a region defined about the movably junction of the arm and the handle;

a detent fixed on the arm about said region;

a first recess, of a plurality of recesses, fixed on the handle about said region;

wherein the toothbrush is maintain in an outstretched position when said detent moves into said first recess.

12. The toothbrush of claim 11, wherein the toothbrush is maintained in a position other than the outstretched position when the detent is moved into one of the plurality of recesses other than said first recess.